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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/753,109	12/29/2000	Michael F. Braitberg	M-8534-2D US	2662

7590 12/04/2001

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EXAMINER

DAVIS, DAVID DONALD

ART UNIT

PAPER NUMBER

2652

DATE MAILED: 12/04/2001

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)
	09/753,109	REDMOND ET AL. 
Examiner	Art Unit	
David D. Davis	2652	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) Responsive to communication(s) filed on ____.

2a) This action is FINAL. 2b) This action is non-final.

3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) Claim(s) 11-14,28-30,44-88 and 95 is/are pending in the application.

4a) Of the above claim(s) ____ is/are withdrawn from consideration.

5) Claim(s) ____ is/are allowed.

6) Claim(s) 11-14,28-30,44-88 and 95 is/are rejected.

7) Claim(s) ____ is/are objected to.

8) Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

9) The specification is objected to by the Examiner.

10) The drawing(s) filed on 15 March 2001 is/are: a) accepted or b) objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11) The proposed drawing correction filed on ____ is: a) approved b) disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.

12) The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a) All b) Some * c) None of:

- Certified copies of the priority documents have been received.
- Certified copies of the priority documents have been received in Application No. ____.
- Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

14) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

a) The translation of the foreign language provisional application has been received.

15) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1) Notice of References Cited (PTO-892) 4) Interview Summary (PTO-413) Paper No(s). ____ .

2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) Notice of Informal Patent Application (PTO-152)

3) Information Disclosure Statement(s) (PTO-1449) Paper No(s) ____ . 6) Other: ____

DETAILED ACTION

Information Disclosure Statement

1. Receipt is acknowledged of the Information Disclosure Statement (IDS) received July 18, 2001.

Specification

2. The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.
3. The disclosure is objected to because of the following informalities: On page 8, line 15, "an/or" should be --and/or--.

Appropriate correction is required.

4. The lengthy specification has not been checked to the extent necessary to determine the presence of all possible minor errors. Applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification.

Claim Rejections - 35 USC § 112

5. Claims 44-53 and 76-77 are rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. Specifically, claim 44 recites a "said objective end being spaced from said disk a

distance of at least about 50 micrometers". This limitation was described in the specification in such a way as to enable a skilled artisan to make and/or use an objective end being spaced from a disk a distance of *at least about* 50 micrometers, which includes every distance between 50 and infinity. Similar, lack of enablement exists with respect to mass in claim 49; drive dimensions in claims 50-53 and 95 and moment inertia in claims 76 and 77.

Claim Rejections - 35 USC § 102

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) do not apply to the examination of this application as the application being examined was not (1) filed on or after November 29, 2000, or (2) voluntarily published under 35 U.S.C. 122(b). Therefore, this application is examined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

7. Claims 11-14, 28-30, 75, 78-80, 85, 87 and 88 are rejected under 35 U.S.C. 102(b) as being anticipated by Berg (US 5,132,944). Berg shows in figure 2 user-removable cartridge 30

having an optical first-surface recording medium 36 for rotation about a first axis configured to provide optical access to at least a first arcuate region of the medium.

Figure 4 of Berg shows rotating optical arm 71 about a second axis to position and objective end and providing laser light along arm 71. Figures 2 and 3 show positioning cartridge 30 adjacent an optical arm. Figure 5 of Berg also shows tracking actuator 206.

8. Claims 44-53 are rejected under 35 U.S.C. 102(e) as being clearly anticipated by Hajjar et al (US 5,963,532). See column 1, lines 60-65 and column 4, lines 38-43.

Claim Rejections - 35 USC § 103

9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

10. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

11. Claims 68-70 are rejected under 35 U.S.C. 103(a) as being unpatentable over in view of Jewell et al (US 5,808,986) in view of Berg (US 5,132,944). Jewell discloses the claimed invention but is silent as to a cartridge. Berg shows in figure 3 a disc in cartridge.

It would have been obvious to a person having ordinary skill in the art at the time the invention was made to provide the disc of Jewell in a cartridge as taught by Berg. The rationale is as follows: one of ordinary skill in the art at the time the invention was made would have been motivated to provide a disc in a cartridge to protect the disc from damage.

12. Claims 44-54, 76, 77, 81-84, 86 and 95 are rejected under 35 U.S.C. 103(a) as being unpatentable over Berg (US 5,132,944). Berg discloses the claimed invention. See description, supra.

Berg, however, is silent as to a universal serial bus (USB) for communicating data between the drive and host device. Berg is also silent as to the moment of inertia (e.g. 5 gm-cm² or less) of the arm, the mass and size of the drive (e.g. 0.05 kg or less, 10 mm thick, 60 mm wide and 50 mm deep). Berg is additionally silent as to the focus actuator being a “piezo-motor”.

Official notice is taken of the fact that USBs are notoriously old and well known in the disk drive art. Official notice is taken of the fact that piezoelectric motors are notoriously old and well known in the disk drive art.

It would have been obvious to a person having ordinary skill in the art at the time the invention was made to provide the drive of Berg with a USB connection as taught in the art. The rationale is as follows: one of ordinary skill in the art at the time the invention was made would have been motivated to provide a drive with a USB connection, which is considered to be well

within the purview of a skilled artisan and absent an unobvious result, to communicate between the drive and a host device.

It also would have been obvious to a person having ordinary skill in the art at the time the invention was made to specify the moment of inertia (e.g. 5 gm-cm² or less) of the arm of Berg, the mass and size (e.g. 0.05 kg or less, 10 mm thick, 60 mm wide and 50 mm deep) of the drive of Berg. The rationale is as follows: one of ordinary skill in the art at the time the invention was made would have been motivated to specify the moment of inertia (e.g. 5 gm-cm² or less) of an optical arm, the mass and size of a drive (e.g. 0.05 kg or less, 10 mm thick, 60 mm wide and 50 mm deep), which is considered to be well within the purview of a skilled artisan and absent an unobvious result, so as to allow for optimization and manufacturing of the optical apparatus and reduction in size of the optical drive.

It additionally would have been obvious to a person having ordinary skill in the art at the time the invention was made to substitute the focusing actuator of Berg with a piezoelectric motor as taught in the art. The rationale is as follows: one of ordinary skill in the art at the time the invention was made would have been motivated to substitute a focusing actuator with a piezoelectric motor, which is considered to be art-recognized equivalents, well within the purview of a skilled artisan and absent an unobvious result, so as to reduce the amount of current need to drive the motor and reduce the overall size of the motor.

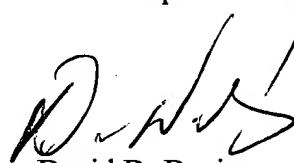
Conclusion

13. Any inquiry concerning this communication or earlier communications from the examiner should be directed to David D. Davis whose telephone number is (703) 308-1503. The

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examiner can normally be reached on Mon., Tues., Thurs. and Fri. between 7:30-6:00. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9314.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-3900. Any other inquiry should be directed to the customer service center whose telephone number is (703) 306-0377.



David D. Davis
Primary Examiner
Art Unit 2652

ddd
December 1, 2001